FIG. 1

FIG. 2

In a cellular communication network, a MS receives information from base stations of neighboring cells

The MS creates a reporting order for reporting cell measurement results based on the received information and/or predefined rules

The MS performs cell measurements and selects relevant measurement results based on predefined rules

The MS transmits the relevant results to the network based on said reporting order

FIG. 3

8	7	6	5	4	3	2	1	
Measurement Results 2 IEI								octet 1
Serving cell and other measurement results (Not relevant)								Octet 2
								Octet 3
								Octet 4
IND=1	RXLEV-NCELL 1						IND=1	Octet 5
RXLEV-NCELL 2 (low part)						IND=1	RXLEV-NCELL 3 (high part)	Octet 6
RXLEV-NCELL 3 (low part)					IND=1	RXLEV-NCELL 4 (high part)		Octet 7
RXLEV-NCELL 4 (low part)				IND=1	RXLEV-NCELL 5 (high part)			Octet 8
RXLEV-NCELL 5 (low part)			IND=0	IND=0	IND=0	IND=0	IND=0	Octet 9
IND=0	IND=0	IND=0	IND=0	IND=0	IND=0	IND=0	IND=0	Octet 10
RXLEV-NCELL24 (low part)				IND=1	IND=1	RXLEV-NCELL24 (high part)		Octet 11
RXLEV-NCELL 25 (low part)		IND=1		RXLEV-NCELL 25 (high part)				Octet 12
RXLEV-NCELL 26 (low part)			RXLEV-NCELL 26 (high part)					Octet 13
RXLEV-NCELL 27 (low part)		RXLEV-NCELL 27 (high part)						Octet 14
RXLEV-NCELL 27 (low part)	IND=1	RXLEV-NCELL 28	RXLEV-NCELL 29					Octet 15
RXLEV-NCELL 32								
IND=1	IND=1					IND=0		Octet 16
IND=0	IND=1							Octet 17

FIG. 4